

ACCIDENT SENSOR

CROSS REFERENCE TO RELATED APPLICATIONS

5 This application is a divisional of U.S. Application No. 09/985,950, filed November 6, 2001, ^{now abandoned,} which is a continuation-in-part of U.S. Application No. 09/319,952, filed September 14, 1999, now abandoned, which was the National Stage of International Application No. PCT/EP98/06266, filed October 1, 1998.

10 BACKGROUND OF THE INVENTION

The invention relates to an accident sensor for detecting an impact.

The accident sensors currently used are designed as so-called acceleration sensors. In the event of an accident, they detect the acceleration or deceleration that occurs upon impact. If the acceleration or deceleration exceeds a critical value, motor-vehicle safety devices, such as seat-belt tighteners or airbags, are triggered. Usually, a plurality of acceleration sensors is mounted to the motor vehicle, with each acceleration sensor detecting the acceleration or deceleration in one spatial direction for detecting a front or side impact, as well as rolling of the vehicle.

20 A disadvantage of these sensors is that an acceleration sensor is required for each spatial direction. Also, such sensors cannot determine the site of the impact. These systems do not directly determine the impact and the associated deformation of the motor vehicle, but only the acceleration or deceleration resulting from the deformation.

25 US 4,346,914 discloses an impact-detection device that responds to acoustical oscillations in the bearing parts of the vehicle body. The acoustical signals are